

ABSTRACT

5 The present invention relates to a preparation method for a lithographic printing plate, which comprises forming a presensitized plate by coating a photosensitive layer or thermosensitive layer on an aluminum substrate treated with an aqueous solution after optionally anodized and developing the presensitized plate with a developer comprising no silicate, wherein the aqueous solution comprises at least one compound selected from the group consisting of nitrite group-containing compound, fluorine atom-containing compound and phosphorous atom-containing compound, in the proviso that 10 when the at least one compound is fluorine atom-containing compound, the treated aluminum substrate has a surface which satisfies the formula: $0.30 \leq A/(A+B) \leq 0.90$ (wherein, A represents peak area of fluorine atom (1S) (counts·eV/sec) determined by X ray Electron Spectroscopy for Chemical Analysis (ESCA), and B represents peak area of aluminum atom (2P) (counts·eV/sec) determined by X ray ESCA), and when the at least one compound is 15 phosphorous atom-containing compound, the treated aluminum substrate has a surface which satisfies the formula: $0.05 \leq A/(A+B) \leq 0.70$ (wherein, A represents peak area of phosphorous atom (2P) (counts·eV/sec) determined by X ray ESCA, and B represents peak area of aluminum atom (2P) (counts·eV/sec) determined by X ray ESCA). 20